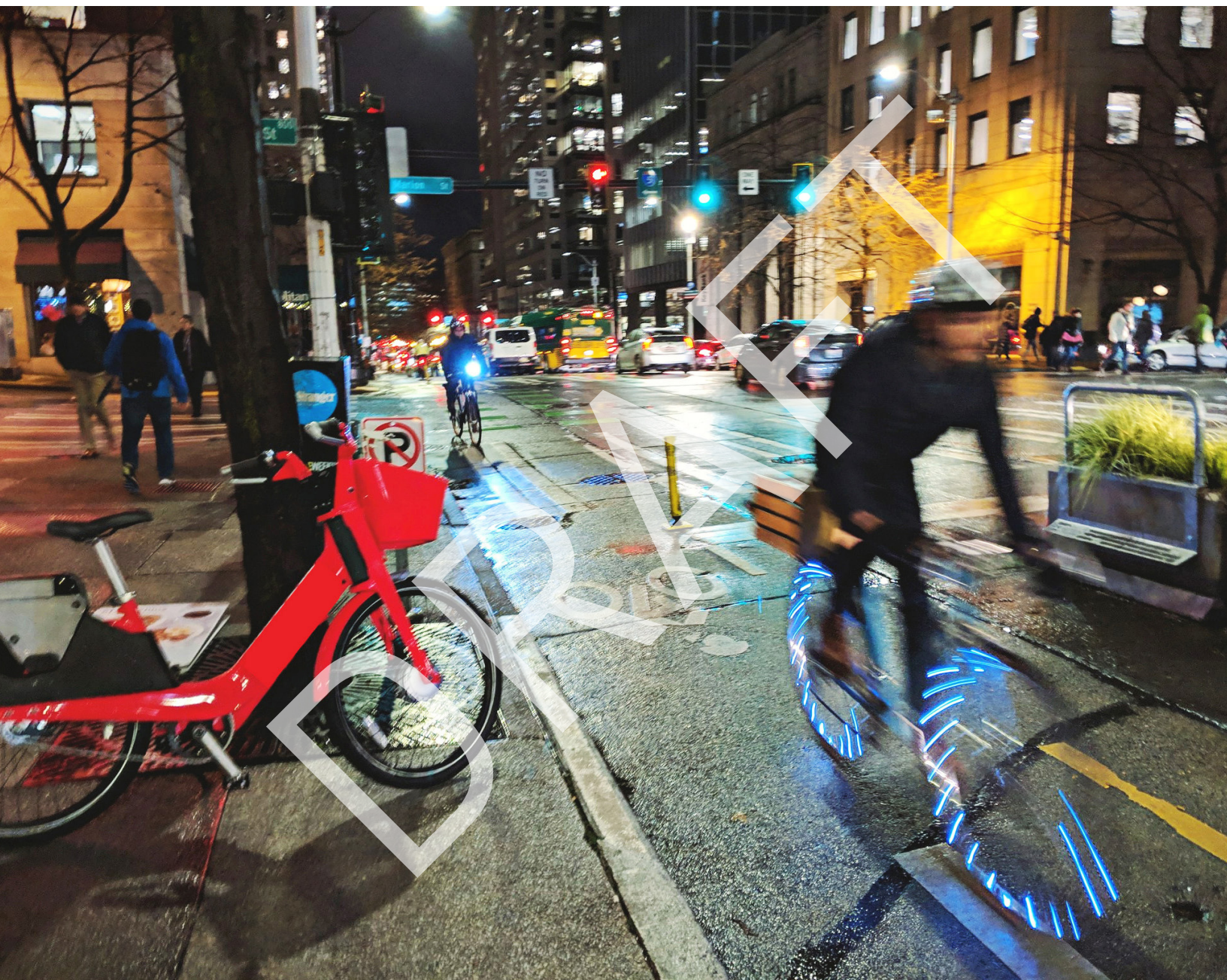


Seattle Department of Transportation

SEATTLE BICYCLE MASTER PLAN

2019-2024 Proposed Implementation Plan



MARCH 28, 2019 **DRAFT**



Seattle
Department of
Transportation



Move Seattle Levy Resources to Help Implement the Bicycle Master Plan

Over the past three years, the City of Seattle has built 27 miles of new bike facilities. Mayor Durkan and SDOT Director Zimbabwe are committed to continuing to build a connected bike network as Seattle grows. We know many people are talking about how we implement Seattle's 2014 Bicycle Master Plan (BMP) recommendations. Today we submitted to City Council a Draft BMP Implementation Plan and proposed project list. Let's talk about what this means.

Last fall, Mayor Durkan directed us to complete a comprehensive update of the Levy to Move Seattle based on more realistic budget assumptions than we used in 2015. The way we came up with the draft six-year plan is by working with the Seattle Bicycle Advisory Board, and considering the updated Levy to Move Seattle commitments. We also continue to use the prioritization framework identified in the 2014 Bicycle Master Plan to make the best investments to maximize safety, connectivity, equity, ridership and livability.

We'll take public comments about this draft plan until April 30 and then submit a revised version to City Council. Once the plan is done, there are still many steps that need to be taken before a project is built because things can change over time. For example, we may need to revise the plan if something unforeseen comes up during engineering, if there are coordination challenges with other public and private projects, or as we learn about other issues through community engagement.

One way we can advance transparency is to identify potential risks or issues that may change over time, and by engaging in an open public process. Our goal is to be upfront about what we'll need to consider before each project is built.

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1. INTRODUCTION

BACKGROUND

The Seattle Bicycle Master Plan's (BMP) vision is that riding a bicycle is a comfortable and integral part of daily life in Seattle for people of all ages and abilities. The BMP identifies projects and programs to be implemented from 2014 to 2033 to achieve the vision and meet the plan's goals for safety, ridership, equity, connectivity, and livability.

Implementing the BMP also supports other city plans and priorities, including the [Housing Affordability and Livability Agenda \(HALA\)](#), [Age-Friendly Seattle](#), [Vision Zero](#), and [Seattle 2035](#).

The BMP outlines an infrastructure plan for a connected network that includes approximately 100 miles of protected bicycle lanes¹ and nearly 250 miles of neighborhood greenways². The BMP also identifies activities designed to support and encourage riding such as facility maintenance, bicycle parking, and educational events.

This 2019-2024 BMP Implementation Plan identifies projects and programs that, combined with existing facilities, will make significant progress towards implementing the BMP in the next six years.

Starting in 2016, BMP implementation is funded primarily by the Levy to Move Seattle, which was approved by voters in 2015.

PURPOSE

This implementation plan describes the work that the Seattle Department of Transportation (SDOT) and our partners will undertake to implement the BMP over the next six years. We update the implementation plan each year to:

- Provide a list of specific infrastructure projects SDOT is planning to build each year;
- Serve as an accountability and reporting tool; and
- Guide future budget requests.

REPORTING REQUIREMENTS

Consistent with Council Resolution 31515, this implementation plan is updated annually by March 31 of each year. Adjustments are made to the project lists and maps to reflect changes to project schedules, changes to project types, and to add or remove projects.

Also, consistent with Council Resolution 31515, SDOT submits a progress report to the City Council as part of the annual implementation plan update. The progress report summarizes progress made during the prior year, and is reviewed and endorsed by the [Seattle Bicycle Advisory Board \(SBAB\)](#). SDOT also provides updates to the City Council and SBAB every 6 months on the status of projects, programs, and actions in the implementation plan.

¹**Protected bicycle lanes:** facilities physically separated from motor vehicle traffic and distinct from the sidewalk; they may be one-way or two-way, and may be at street level or raised several inches above.

²**Neighborhood greenways:** residential streets with low motorized traffic volumes and speeds that are designated and designed to give bicycle and pedestrian safe and pleasant travel priority.

In 2018 Council passed Resolution 31826, a resolution relating to the Seattle Center City Bike network (CCBN). This resolution proposed an implementation schedule for the CCBN and requested quarterly status updates to the Chair of the Sustainability and Transportation Committee through 2019.



2. SAFETY

A central focus of the BMP is to design and implement bicycle facilities that are safe and comfortable for riders of all ages and abilities. Since the BMP was adopted in 2014, we have launched our [Vision Zero](#) initiative, which addresses safety for all travelers, and completed the Bicycle and Pedestrian Safety Analysis. These complement the BMP's focus on safety, and are described below.

VISION ZERO

In 2015, the City of Seattle launched Vision Zero, our plan to end traffic deaths and serious injuries on city streets by 2030 through data-driven engineering, education, and enforcement. Staff who implement the BMP are now part of SDOT's Vision Zero team, which enhances collaboration and leverages our commitment to safety.

The bike facilities included in this plan provide innovative engineering and smarter street designs that support Vision Zero and the bicycle safety programs help implement the education components of the BMP and Vision Zero. To address the enforcement component, the Seattle Police Department (SPD) will continue to conduct education and enforcement efforts targeting high crash corridors and intersections, and the most frequent contributing factors to bicycle crashes = impairment, speeding, distraction, and failure to yield. We will work with SPD to educate people in advance of these patrols, so everyone will expect appropriate enforcement and develop a better understanding of the rules of the road.

BICYCLE AND PEDESTRIAN SAFETY ANALYSIS

In 2016, we completed the [Bicycle and Pedestrian Safety Analysis](#) (BPSA), which studied eight years of citywide data to identify which roadway design and user behavior characteristics most correlated with collisions involving people walking or biking. Based on the data analysis, we developed a safety prioritization model to identify opportunities for spot and corridor improvement projects. The results of this research help inform where the BMP can prioritize bicycle infrastructure as a function of bicycle safety and where spot projects can improve existing bicycle facilities. In 2018, we launched Phase II of the BPSA to better understand the contributing circumstances of crashes involving people walking and biking. This research will continue to inform our work going forward and move us towards our Vision Zero goal. We expect that this second phase of research will be completed in 2019.

3. BICYCLE MASTER PLAN PROGRESS

The projects in the tables below represent those projects funded by the levy to move Seattle that were completed in 2016, 2017 and 2018 and collectively added more than 25 miles to the network. They range

from short extensions like the Banner Way Upgrade, to transformative projects like the 2nd Ave Protected Bike Lane that dramatically increased regional network connectivity.

PROJECTS COMPLETED IN 2016					
Project Name	On Street	From Street	To Street	Facility Type	Facility Mileage
2nd Ave PBL Demonstration	2nd Ave Ext S	Yesler Way	S Washington St	PBL	0.07
Delridge Way SW PBL	Delridge Way SW	SW Myrtle St	SW Holden St	PBL	0.38
N 34th St PBL	N 34th St	Fremont Ave N	Phinney Ave N	PBL	0.23
Roosevelt Way NE Paving and Safety Improvements	Roosevelt Way NE	NE 65th St	University Bridge	PBL	1.37
University Bridge PBL	University Bridge	Roosevelt Way NE	Fuhrman Ave E	PBL	0.35
Westlake Ave N PBL ¹	Westlake Ave N	W Raye St	Valley St	PBL	1.23
Meridian Ave N Paving and Safety Improvements	Meridian Ave N	N 103rd St	N 112th St	BL	0.44
Renton Ave S BL	Renton Ave S	51st Ave S	City Limits	BL	1.34
SW Admiral Way BL	SW Admiral Way	California Ave SW	63rd Ave SW	BL	1.39
39th Ave NE NGW Extension	39th Ave NE/NE 85th St/38th Ave NE/NE 89th St	NE 80th St	32nd Ave NE	NGW	0.8
E Columbia St NGW	E Columbia St	12th Ave	29th Ave	NGW	1.02
Wallingford NGW Upgrade (Added improvements to existing)	N 43rd St/Burke Ave N/N 44th St/NE 44th St	Stone Way N	Latona Ave NE	NGW	N/A
39th Ave NE NGW Upgrade (Added improvements to existing)	39th Ave NE	Burke-Gilman Trail	NE 80th St	NGW	N/A
Total Miles Delivered in 2016: 8.62					

¹This project did not use levy funding.

PBL = Protected Bike Lane

BL = Bike Lane

NGW = Neighborhood Greenway

PROJECT COMPLETED IN 2017					
Project Name	On Street	From Street	To Street	Facility Type	Facility Mileage
520 Bridge Trail (WSDOT) ¹	SR-520 Bridge	Montlake Blvd E	City Limits	Trail	2.18
Washington Park Arboretum Loop Trail (Seattle Parks Dept.) ¹	New Facility	Graham Visitor Center	E Madison St	Trail	1.20
N 92nd St PBL	N 92nd St	Wallingford Ave N	1st Ave NE	PBL	0.38
Interbay Trail Connections	20th Ave W/Gilman Ave W	Elliot Bay Trail	20th Ave W	PBL	1.92
One Center City - 9th Ave N PBL (Phase 1)	9th Ave N	Westlake Ave N	Harrison St	PBL	0.35
Roy St PBL	Roy St	Dexter Ave N	9th Ave N	PBL	0.12
Dexter Ave N PBL	Dexter Ave N	Mercer St	Roy St	PBL	0.06
Western Ave PBL	Western Ave	University Ave	Virginia Ave	PBL	0.34
NE Pacific PBL	NE Northlake Way/NE Pacific St (sidewalk project)	7th Ave NE	Eastlake Pl NE	PBL	0.09
Pike/Pine PBLs	Pike St/Pine St	2nd Ave	8th	PBL	0.54
Cedar Park Elementary NGW Connection	37th Ave NE/NE 125th St/38th Ave NE	NE 123rd St	NE 145th St	NGW	1.21
Greenwood Elementary NGW Connection	1st Ave NW	N 73rd St	N 92nd St	NGW	0.98
Banner Way NE Corridor Project	Banner Way NE	5th Ave NE	15th Ave NE	BBL	0.57
Spring Street Bike Lane	Spring St Bike Lane (Bus Lane Project)	3rd Ave	6th Ave	BL	0.18
S Dearborn Project	S Dearborn St	Rainier Ave S	6th Ave S	BBL	0.69
Total Miles Delivered in 2017: 10.81					

¹This project did not use levy funding.

PBL = Protected Bike Lane

BL = Bike Lane

BBL = Buffered Bike Lane

NGW = Neighborhood Greenway

PROJECT COMPLETED IN 2018					
Project Name	On Street	From Street	To Street	Facility Type	Facility Mileage
2nd Ave PBL	2nd Ave	Denny Ave	Pike St	PBL	0.92
7th Ave PBL	7th Ave	Westlake Ave	Pike St	PBL	0.39
Banner Way Upgrade	Banner Way	NE 77th St	9th Ave NE	PBL	0.57
S Dearborn St PBL	S Dearborn St	Rainier Ave S	6th Ave S	PBL	0.46
Eagle Staff Middle School NGW Connection	N 92nd St	Fremont Ave N	Wallingford Ave N	NGW	0.65
Highland Park NGW Connection	SW Trenton St/ 11th Ave SW	17th Ave SW	10th Ave SW	NGW	0.52
Louisa Boren STEM K-8 NGW Connection	SW Juneau St/ Croft Pl SW	21st Ave SW	26th Ave SW	NGW	0.45
Olympic Hills NGW Connection	25th Ave NE/NE 130th S/20th Ave NE	NE 127th	NE 135th	NGW	0.76
Rainier Valley NGW Phase 1	30th Ave S/ S Ferdinand St/ 46th Ave S	S College St	S Henderson St	NGW	5.54
Total Miles Delivered in 2018: 10.26					

Spot improvements are prioritized annually by the frequency and severity of collisions, geographic equity which is assessed through race and social justice initiative metrics, and with guidance from the prioritization in the 2017 Trails Upgrade Plan which builds from the Seattle Pedestrian Master Plan and Bicycle Master Plan. SDOT also considers opportunities to partner and leverage with other projects.

BICYCLE RACKS AND SPOT IMPROVEMENTS COMPLETED IN 2016 – 2018			
Levy Deliverable	2016	2017	2018
Bike parking spaces added	622	466	306
Urban trail and bikeway spot improvement	10	12	12

We met or exceeded our 2018 goals informed by the Bicycle Master Plan for education and outreach, spot improvements projects, and bike racks installed. See Appendix 1: Performance Measures for more information on our safety, ridership, and connectivity achievements. We

did not meet the Neighborhood Greenway and Protected Bicycle Lane mileage goals set for 2018 for a variety of reasons including weather and contractor delays. The Projects not completed in 2018 that will be completed in 2019 are listed below:

2018 PROJECTS WITH 2019 FINAL DELIVERY ¹				
Facility Type	Project Name	Facility Mileage	Estimated Completion	Notes
PBL	NE 65th St Vision Zero Safety Corridor	0.74	2019	Delay of equipment. Weather.
PBL	NE 70th St PBL	0.20	2019	External agency coordination and weather.
NGW	NE 70th St NGW	0.17	2019	External agency coordination and weather.
PBL	S Columbian Way Paving Project	1.11	2019	Contracting delays. Missed the weather window for paving.
PBL	Swift Ave S/S Myrtle Paving Project	1.75	2019	Contracting delays. Missed the weather window for paving.
PBL	Wilson Ave Paving Project	0.81	2019	Contracting delays. Missed the weather window for paving.
NGW	North Seattle NGW	2.70	2019	External agency coordination and weather.
NGW	West Seattle NGW	2.21	2019	External agency coordination
Total miles of 2018 Projects with 2019 final delivery: 9.69				

¹Total number of projects planned for 2019 delivery and their corresponding mileage can be found in the final project delivery list.

In addition to the projects listed above SDOT initiated installation of a protected bike lane on 35th Ave NE in conjunction with a paving project. After considerable community engagement, SDOT has determined not to proceed with the installation of the bike facilities at this time, but to focus corridor improvements on pedestrian safety and additional improvements to the 39th Ave NE greenway.

4. PRIORITIZATION

The 2019- 2024 implementation plan includes a set of proposed infrastructure projects. The project list in this plan was developed using the prioritization process established in the BMP, which includes both a quantitative and a qualitative process.

QUANTITATIVE PRIORITIZATION

Quantitatively, all bicycle projects are assigned scores based on five factors, in order of highest weight to lowest:

- Safety
- Connectivity
- Equity
- Ridership
- Livability

The sum of these scores is assigned to individual project segments, which are then divided into five different priority tiers of projects. Tier 1 is the highest scoring 20% of the projects, Tier 2 is the next highest 20%, and so on.

QUALITATIVE PRIORITIZATION

The next step of our prioritization process considers qualitative factors including policy directives, community interest, and geographic balance. In collaboration with the Seattle Bicycle Advisory Board these factors were considered along with the quantitative data to select projects that helped to connect and extend Seattle's all ages and abilities network.

LEVERAGING OPPORTUNITIES

Leveraging the benefits of other SDOT projects was another high priority in this year's project selection process. SDOT and SBAB prioritized BMP projects if they could be completed at the same time as other projects involving major work on a street, including bus rapid transit, paving, or safety projects.¹ The complete streets approach helps to reduce construction impacts and provides benefits to multiple SDOT and partner agency programs. We also look for opportunities to partner with private development to support HALA through BMP investments.

Throughout the next five years, we will also be looking to leverage funding opportunities outside SDOT and the City, including those available through Sound Transit Station Access Improvement funding. SDOT will also leverage opportunities presented by WSDOT's replacement of the SR 520 bridge in improving bike connections.

¹Approximately 25 miles of bike facilities will be delivered by other programs over the next 5 years.

5. 2019-2024 PROPOSED PROJECTS

Appendix 3 describes the selected projects for implementation for 2019 through 2024.

For ease of review and discussion, the project list and maps are organized by geographic sector (north, central, and south), and provide a description including desired year, facility type, and project length. All projects for the six-year implementation plan are included to show the connected network.

There are several projects on the list and map where the exact route, length, and/or facility type of each project are still unknown. In those instances, the location, length, and/or facility type is listed as “TBD” (to be determined). Subsequent

implementation plans will be updated with more specific information as these projects enter the project definition phase.

There are several projects where we have identified potential risks for construction. These risks include project cost, neighborhood support, and corridors that have high demands from other modes.

In addition, three neighborhood greenways will be upgraded in 2019. Because they are existing facilities and won't add new mileage to the bike network, they are in a table below separate from the overall project list.

2019 NEIGHBORHOOD GREENWAY UPGRADES				
Project Name	Facility Mileage	On Street	From Street	To Street
Ballard East-West Signal detection improvement at 8th Ave NW	2.1	NW 58th St	Seaview Ave NW	4th Ave NW
Central Area East - West Crossing Improvement, curb bulbs/ramps at 14th Ave	1.2	E Columbia St	Broadway	29th Ave E
Delridge - Highland Park Speed Hump Replacement	4.0	17th Ave SW/ 21st Ave SW	Delridge Way SW	SW Cambridge St

QUICK WINS

We consistently look for opportunities to quickly enhance safety and comfort, both for permanent and interim facilities. This can include upgrading minor-separation bike lanes, intersection improvements, and pavement repair. Examples of upcoming quick wins are described below:

The High Point Loop neighborhood greenway will build off of the Safe Routes to School crossing at Sylvan Way SW and SW Holly St. This loop will provide an enhanced connection for the High Point neighborhood to the West Seattle Neighborhood Greenway Phase 1, High Point Elementary School and the future crossing of 35th Ave SW at SW Graham St.

Greenway Upgrades

The Neighborhood Greenway Program systematically evaluates greenways after they are installed. The evaluation takes into account vehicle speeds, vehicle volumes, collisions, ridership numbers and community feedback to determine what improvements need to be made. In 2017 and 2018 SDOT upgraded the following greenways based on those evaluations: Delridge-Highland Park, Central Area North-South, Jackson Place, and PhinneyWood. In 2019 there will be upgrades to Delridge-Highland Park, and Central Area East-West.



DRAFT Planned Bicycle Master Plan Projects 2019 - 2024

BMP Project Status

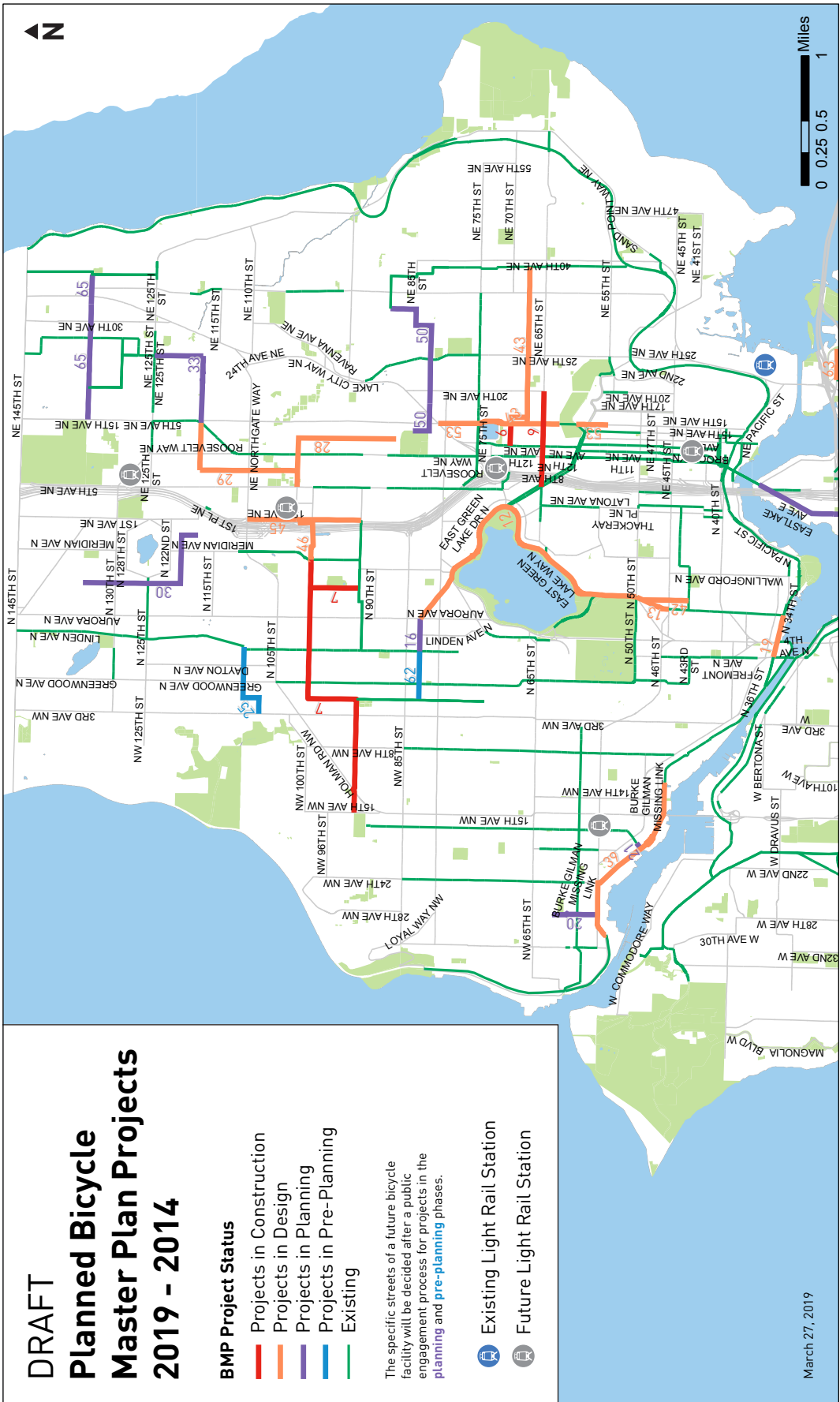
- Projects in Construction
- Projects in Design
- Projects in Planning
- Projects in Pre-Planning
- Existing

The specific streets of a future bicycle facility will be decided after a public engagement process for projects in the **planning** and **pre-planning** phases.

March 27, 2019

0 0.5 1 2 Miles





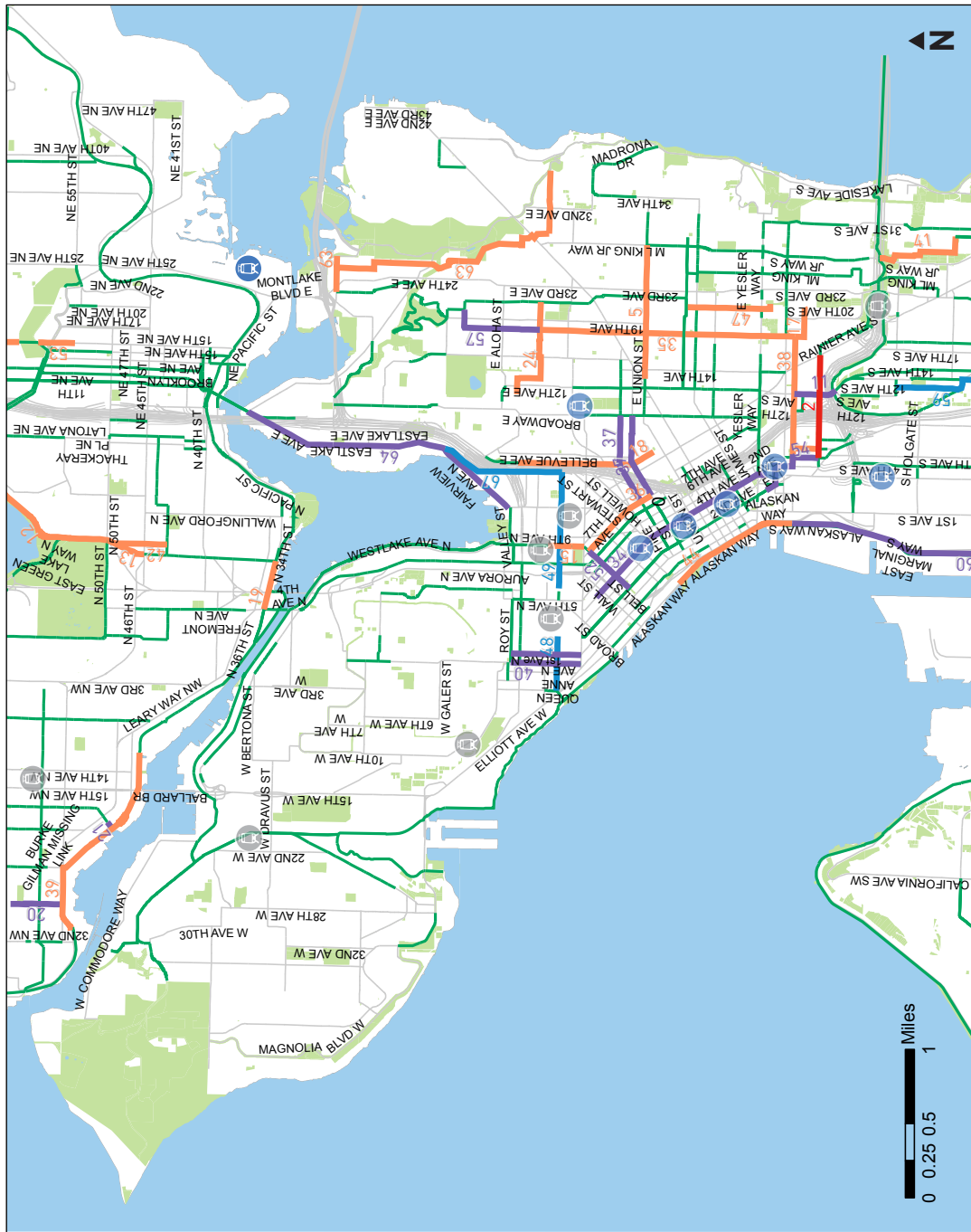
DRAFT Planned Bicycle Master Plan Projects 2019 - 2024

BMP Project Status

- Projects in Construction
- Projects in Design
- Projects in Planning
- Projects in Pre-Planning
- Existing

The specific streets of a future bicycle facility will be decided after a public engagement process for projects in the **planning** and **pre-planning** phases.

- Existing Light Rail Station
- Future Light Rail Station



March 27, 2019

This map illustrates the proposed street layout for the new airport in the City of Portland, Oregon. The map shows the Willamette River to the north and the existing airport to the south. Major roads like I-5 and I-205 are shown. Key locations marked include the existing airport, the new airport site, and various surrounding neighborhoods. A scale bar indicates distances up to 1 mile.

■ Projects in Construction
■ Projects in Design
■ Projects in Planning
■ Projects in Pre-Planning
■ Existing

Existing Light Rail Station
Future Light Rail Station

A scale bar for miles, showing a horizontal line with a white segment in the middle. Below the line are the numbers 0, 0.25, 0.5, and 1. The word "Miles" is written vertically to the right of the line.

6. COORDINATION PROJECTS UPDATE

Some of the projects that contribute to building out the all ages and abilities bicycle network involve multiple agencies and have multi-year schedules.

For these projects, we provide an annual update through this report, while additional information is available through the individual project websites.

Project	Description	Expected Completion Date	Bike Components	Where to Learn More
SR-520 Bridge Replacement and HOV Program	Replaces the SR 520 floating bridge across Lake Washington and makes transit and roadway improvements throughout the SR-520 corridor from I-5 in Seattle to I-405 in Bellevue.	Montlake Phase: 2022-2023 Portage Bay Phase: 2026-2028 Montlake Cut Phase: 2029	<ul style="list-style-type: none"> 14-foot wide bicycle and pedestrian path across Lake Washington (opened in 2017) and Portage Bay New bicycle/pedestrian crossings over SR 520 and I-5 	Email: SR520bridge@wsdot.wa.gov Website: www.wsdot.wa.gov/Projects/SR520Bridge/
Accessible Mt. Baker	Builds near-term access and safety improvements at the Mt. Baker Link light rail station, and builds long-term multimodal transportation enhancements	2024	<ul style="list-style-type: none"> TBD walking and biking connections in the area to be completed by 2024 	Website: www.seattle.gov/transportation/projects-and-programs/programs/transportation-planning/accessible-mt-baker
Burke-Gilman Trail Missing Link	Connects two existing portions of the Burke-Gilman Trail in Ballard to complete the regional facility that otherwise runs continuously from Kenmore Park to Golden Gardens.	Phase 1: 2019 Phase 2: 2020	1.4-mile multi-use trail on NW 45th St, Shilshole Ave NW, and NW Market St.	Email: BGT_MissingLink_Info@seattle.gov Website: www.seattle.gov/transportation/projects-and-programs/programs/bike-program/burke-gilman-trail-missing-link-project
Center City Bike Network	Builds near- and long-term improvements to the transportation system and public realm in Seattle's Center City neighborhoods	2019-2021	Bike facilities on multiple north-south and east-west streets in the Center City. Check project map for updates.	Website: www.seattle.gov/transportation/projects-and-programs/programs/bike-program/center-city-bike-network
Waterfront Seattle	Rebuild Seattle's waterfront following the removal of the Alaskan Way Viaduct	2019-2023	A 2-way protected bike lane from S Yesler St to Pine St	Email: info@waterfrontseattle.org Website: www.waterfrontseattle.org/

Project	Description	Expected Completion Date	Bike Components	Where to Learn More
Northgate Pedestrian and Bicycle Bridge	Build a new pedestrian and bicycle bridge over I-5 to improve connections within the Northgate community	2020-2021	<ul style="list-style-type: none"> A new pedestrian and bicycle bridge over I-5 A potential shared-use path on the west side of 1st Ave NE between NE 92nd St and NE 103rd St A potential shared-use path on the east side of 1st Ave NE between NE 103rd St and NE Northgate Way 	Email: NorthgateBridge@seattle.gov Website: www.seattle.gov/transportation/northgatepedbridge.htm
Transit-Plus Multi Modal Corridor Program	Build new Transit-Plus Multi Modal Corridors throughout the City	2021-2024	Improvements to crossings, neighborhood greenways, and bike lanes	Website: www.seattle.gov/transportation/projects-and-programs/programs/transit-program/transit-plus-multimodal-corridor-program



7. PROJECT DELIVERY: TAKING PROJECTS FROM 1% DESIGN TO 100% CONSTRUCTION

We rely on key tools and practices to develop and deliver our projects, including conducting a Complete Streets review, applying the Race and Social Justice Initiative equity toolkit, engaging with community members, and evaluating alternatives. The BMP identifies where bicycle facilities are needed and what facilities are appropriate; our public engagement process focuses on soliciting community input to ensure projects balance community interests. We describe these tools here and combine them along with the guidance in the BMP to direct the Project Delivery Process laid out on the following page.

COMPLETE STREETS POLICY

Bicycle facilities are an integral aspect of Complete Streets. Established in 2012, the Complete Streets policy guides how we develop projects to provide for all users of the roadway. We use a checklist to help us review the needs of other modes, relationships to land use, and the future vision for streets so that we can reflect those needs in our project development.

RACE AND SOCIAL JUSTICE INITIATIVE

The vision of the Seattle Race and Social Justice Initiative is to eliminate racial inequity in the community. To do this requires ending individual racism, institutional racism, and structural racism. The Racial Equity Toolkit lays out a process and a set of questions to help evaluate and guide project and program development. This toolkit was used as part of creating the BMP and is also used to evaluate individual projects.

PUBLIC ENGAGEMENT

During the planning, design, and construction phases of all our projects, we conduct inclusive public engagement and strive to balance varying needs presented by public comments that we receive at each step of our outreach processes.

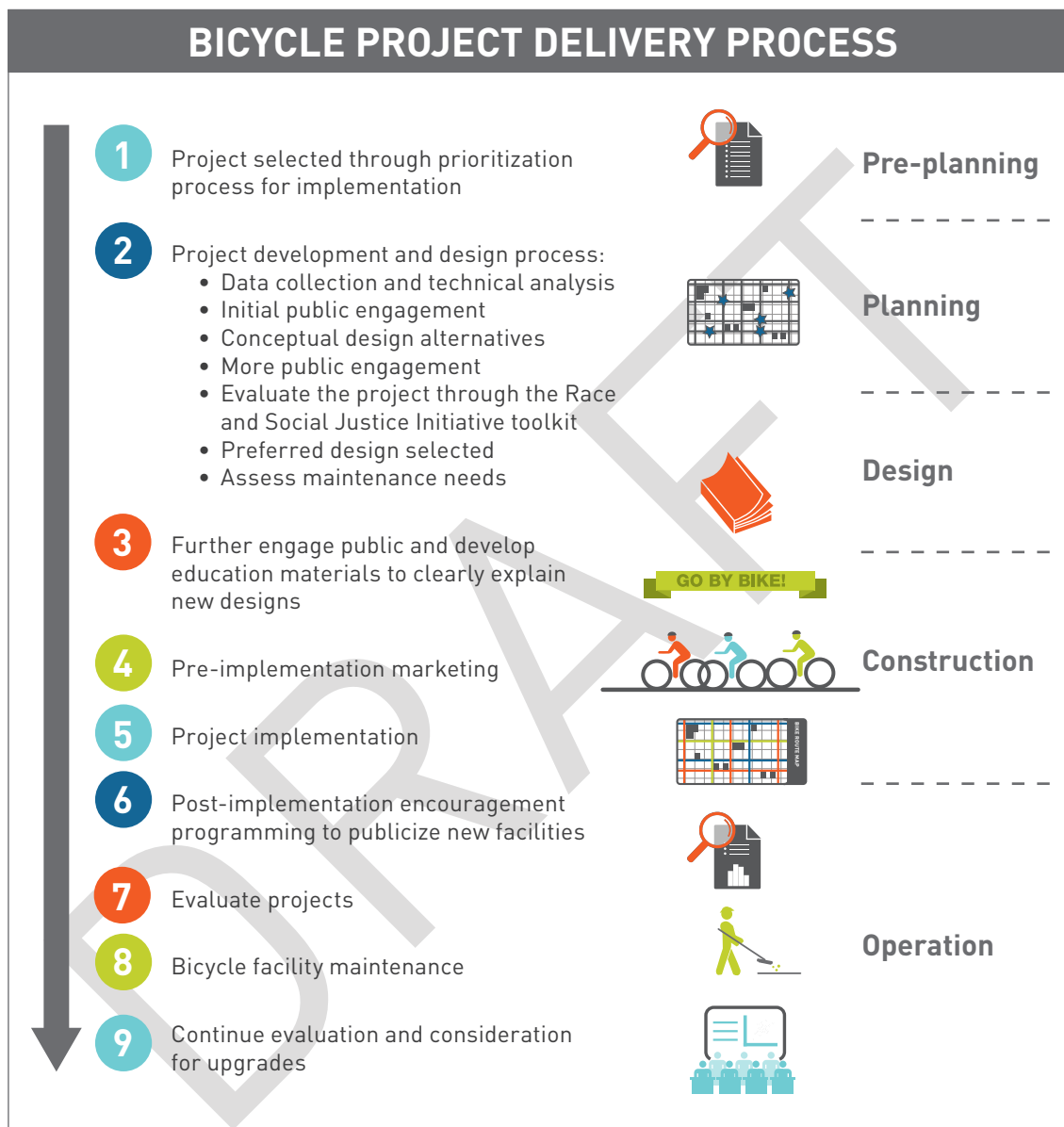
SDOT has developed an iterative public engagement process built on gathering input from community members about their needs and concerns, presenting them with options that meet project goals and objectives, and incorporating their input along with our expertise and collected data in selecting a design for a particular project.

We also reach out to the public when we implement the strategies, actions, and programs shown in Appendix 2, which include installing bicycle parking, conducting education and encouragement programs, and performing bike facility maintenance.

SDOT uses a wide variety of methods to reach community members, including mailers, traditional open houses, drop-in events, online open houses and surveys, and joining regularly scheduled meetings and events of community-based organizations. We will continue working with the Seattle Bicycle Advisory Board and the Department of Neighborhoods to continually strengthen our public engagement strategies and reach more members of the community more effectively throughout the project development and delivery process.

ALTERNATIVES DEVELOPMENT AND EVALUATION

The project development and delivery process is outlined in the BMP and summarized in this diagram:



The bicycle network recommended in the BMP was developed based on a robust methodology. However, as projects move through the project development process, our analysis, design, and community engagement may lead to a project being developed in a different way or location than envisioned in the plan. For example, the BMP may recommend a protected bike lane

on a particular street, but through our project development and outreach process, we may determine that an alternate facility, such as a parallel neighborhood greenway, would be preferable. The goal of our engagement process is to make these determinations as early in the project development phase as possible.

8. FUNDING AND COSTS

FUNDING ASSUMPTIONS

The 2019-2024 Implementation Plan leverages the funding provided by the Levy to Move Seattle with other local funds as well as existing and anticipated grant funding. Additionally, some of our large capital programs, such as the Transit-Plus Multimodal Corridor Program, seek to deliver bicycle improvements where appropriate. This multi-layered funding approach allows us to maximize the return on local public funding.

The Levy to Move Seattle provides \$65 million over nine years with the goal to build protected bike lanes, bike lanes, buffered bike lanes, and neighborhood greenways. It also provides \$7 million for programs (including maintenance and bicycle parking). On an annual basis, the

levy provides \$8 million per year for BMP implementation, which includes \$7.2 million for facilities and \$0.8 million for programs. In November 2018, a levy assessment was published and the bicycle master plan program was identified as one of the programs that was challenged by program cost increases.

The funding assumptions include secured grants as well as estimates for grants we will be seeking in the future. If we receive grant funding at a higher or lower amount, it will affect the number, type, extent, and features of the projects we can construct. We will continue to partner with other agencies and programs, and to seek additional grants and funding sources to meet the Move Seattle mileage goals.



Funding assumptions for 2019-2024 BMP implementation are provided in the table below.

BIKE MASTER PLAN IMPLEMENTATION - BIKE FACILITY FUNDING							
Adopted Budget	2019	2020	2021	2022	2023	2024	6-Year Total
Move Seattle Levy	\$9,114,000	\$6,489,000	\$13,210,000	\$7,001,000	\$5,868,000	\$1,244,000	\$42,926,000
Grants*	\$2,532,000	\$4,821,000	\$0	\$0	\$0	\$0	\$7,353,000
Washington State Convention Center	\$1,600,000	\$600,000	\$2,400,000	\$11,400,000	\$0	\$0	\$16,000,000
Other**	\$3,037,000	\$1,322,000	\$1,293,000	\$1,325,000	\$1,358,000	\$2,219,000	\$10,553,000
Total							\$76,832,000

BIKE MASTER PLAN IMPLEMENTATION - BIKE FACILITY SPENDING PLAN							
	2019	2020	2021	2022	2023	2024	6 -Year Total
Neighborhood Greenways Programatic management	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$3,000,000
Bike racks	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$1,800,000
Protected Bike Lanes/ Bike lanes/Trails program management	\$890,000	\$890,000	\$890,000	\$890,000	\$890,000	\$890,000	\$5,340,000
Total funding for Construction							\$61,119,000
Total funding for Design							\$2,595,000
Contingency							\$2,978,000
Total							\$76,832,000

BIKE MASTER PLAN-PROGRAMMATIC MAINTENANCE & SPOT IMPROVEMENTS							
Move Seattle Levy	\$1,100,000	\$1,200,000	\$1,200,000	\$1,133,000	\$1,000,000	\$1,000,000	\$6,633,000
Other				\$167,000	\$329,000	\$322,000	\$818,000
Total Funding	\$1,100,000	\$1,200,000	\$1,200,000	\$1,300,000	\$1,329,000	\$1,322,000	\$7,451,000

*The budget assumes a placeholder amount for assumed grants based on what we typically receive and acknowledges current uncertainty in obtaining federal grants. If we received grant funding at a higher or lower amount, this will affect the number, type, extent, and features of the projects we can construct.

***"Other" sources include Vehicle Licensing Fees, Urban Trails and Bikeways funding.

Note: Any budget surplus carries forward to the next year. Local sources include Vehicle Licensing Fees, Move Seattle Levy, and Urban Trails and Bikeways funding. Levy funding will vary year to year and project mileage will be adjusted. The budget assumes a placeholder amount for assumed grants based on what we typically receive and acknowledges current uncertainty in obtaining federal grants. If we received grant funding at a higher or lower amount, this will affect the number, type, extent, and features of the projects we can construct.

COST ASSUMPTIONS

To develop estimates for new projects, we use data from recently completed projects and final estimates from projects about to begin construction. Project costs vary greatly due to the wide range of designs (from paint and post to fully raised and separated paths), site conditions (working downtown or near steep slopes can increase costs), and whether the project can be combined with other nearby projects.

For the 2019 projects in this plan, preliminary cost estimates have been developed based on each project's individual characteristics.

With projects coming in at a higher cost than anticipated and less federal grants available, we are strategizing how to prioritize the projects in the implementation plan to build out the best network with what we have.

DRAFT

APPENDIX 1: PERFORMANCE MEASURES

The 2014 Bicycle Master Plan includes performance measures to assess whether the plan is meeting its goals. The measures are focused on assessing progress over the long-term, and data is collected and analyzed either

annually or as the data is available to help track interim progress. The table below includes the BMP performance measures and progress towards those targets based on the most recently available data.

PERFORMANCE MEASURE TARGETS			
Goal	Performance Measure	Performance Target	Performance Result
Ridership	Number of people biking counted at locations throughout Seattle	Quadruple ridership between 2014 and 2030	2014-2015: 0.6% decrease ¹ 2015-2016: 5.7% increase ¹ 2016-2017: 0.9% decrease ¹ 2017-2018: 12.1% increase ¹
Safety	Bicycle collision rate	Reduce bicycle collisions by half (50 percent) between 2013 and 2030	2014: 426 reported collisions 2015: 469 reported collisions 2016: 407 reported collisions 2017: 346 reported collisions 2018: 393 reported collisions ²
	Number of serious injuries and fatalities	Zero by 2030	2013: 27 serious injuries; 2 fatalities 2014: 29 serious injuries; 1 fatality 2015: 24 serious injuries; 1 fatality 2016: 26 serious injuries; 2 fatalities 2017: 12 serious injuries; 2 fatalities 2018: 29 serious injuries 1 fatality ²
Connectivity	Percentage of bicycle facility network completed	100 percent of bicycle system constructed by 2035	2013: 22% 2016: 28% (167/608 miles) 2017: 29% (179/608 miles)
Equity	Areas lacking bicycle facilities	Zero areas of City lacking bicycle facilities by 2030	2012: 7 census tracts 2016: 7 census tracts 2017: 7 census tracts 2018: 7 census tracts
Livability	Percentage of households within ¼ mile of an all ages and abilities bicycle facility	100% of households in Seattle within ¼ mile of an all ages and abilities bicycle facility by 2035	2013: 34% 2016: 49% 2017: 60% 2018: 61%

¹Percentages are based off bike counts taken at 5 locations where reliable data was available for 2014, 2015, 2016, 2017, and 2018.

²Based on January 2019 query.

APPENDIX 2: STRATEGIES AND ACTIONS

Previous implementation plan updates are included to provide consistent reporting.

BMP Strategy	Activity	2016 Status	2017 Status	2018 Status	2019 Status
THE BICYCLE NETWORK					
4.1 – 4.6 Implement the bicycle facilities	See project lists for projects to be studied, designed, and implemented in 2018-2022. SDOT will continue to research and incorporate best practices, leverage other capital project investments, and develop educational tools.	SDOT completed 8.65 miles.	SDOT completed 10.81 miles	SDOT completed 10.26	SDOT will continue working to meet targets.
4.7 Implement upgrades of existing bicycle facilities	Bicycle facilities upgrade projects will be identified through BMP project prioritization and through safety corridor projects. Refer to strategy 7.3 and 7.13 for related work	SDOT will work to meet targets	SDOT will work to meet targets	SDOT upgraded 3 NGW and completed 12 spot safety projects	SDOT will continue working to meet targets. This will include looking at collaboration opportunities with Vision Zero corridor projects and Arterial Asphalt and Concrete Program.
4.8 Install bicycle detection at traffic signals in every new bicycle facility, as well as with all street replacement projects	SDOT will develop consistent bicycle detection standards by bicycle facility type, inventory existing detection on high priority bike facilities to determine upgrade needs, and develop a prioritized work plan for implementation.	SDOT has been recommending appropriate bicycle detection on a case-by-case basis, and may start developing guidelines based on facility type and intersection geometry in 2016. Inventory will begin in 2016, if staffing allows for this effort.	SDOT has been implementing bicycle detection at traffic signals on a case-by-case basis when it develops a bicycle facility that crosses a major street at a signalized intersection.	SDOT continues to implement bicycle detection at traffic signals on a case-by-case basis when it develops a bicycle facility that crosses a major street at a signalized intersection.	SDOT will continue its current practices
4.10 Design all bicycle facilities to meet or exceed the latest federal, state and local guidelines	This is SDOT's standard practice. In addition, the update of the Seattle Right-of-Way Improvements Manual will include bicycle facility design guidelines.	SDOT is currently updating the Right-of-Way Improvement Manual (ROWIM), which include bicycle design guidelines. Director's Rule expected by end of the year.	SDOT is currently finishing the Right-of-Way Improvement Manual (ROWIM), which includes bicycle design guidelines.	The update to the ROWIM was completed in 2017. The bicycle design guidelines were completed in 2018.	SDOT is designing bicycle facilities with guidance from the completed Bicycle Design Guidelines

BMP Strategy	Activity	2016 Status	2017 Status	2018 Status	2019 Status
THE BICYCLE NETWORK					
4.12 Integrate a multimodal decision making process into the update of the Comprehensive Plan	SDOT has developed a right-of-way (ROW) allocation framework, a comprehensive methodology, to determine the uses and functions of corridors.	The ROW allocation framework is within the draft Comprehensive Plan Update for consideration of adoption.	Complete. The new Comprehensive Plan became effective on November 28, 2016 and includes ROW allocation framework.	Completed in 2016	
END-OF-TRIP FACILITIES					
5.1 Update the Seattle Municipal Code (SMC) bicycle parking requirements	SDOT will work with DPD to review the existing language and identify proposed changes.	SDOT has provided comment to DPD/SDCI on land use code changes for bicycle parking.	Updates to the SMC are currently under review process and will be submitted to City Council at some point in the future.	SDCI has submitted bicycle parking code updates to City Council Planning Land Use, and Zoning Committee with the intent to adopt in 2018	SDCI and SDOT are reviewing the language in the guidelines to identify potential changes to the land use code with a Joint directors rule between SDOT/SDCI to be signed sometime in 2019
5.2 Develop a bicycle Parking implementation program	SDOT will develop a methodology to identify and prioritize high-demand locations for bicycle parking in 2015, and will complete a Client Assistance Memo (CAM) for installation of private bicycle racks in the public right-of-way.	Internal guidelines for private bicycle rack installation in the public Right-of-Way are being developed and a CAM will be developed later in 2016.	SDOT will be developing an illustrated guide to bicycle parking to provide clearer and more direct assistance to business owners and developers that wish to install bike parking in the public right-of-way.	In addition to SDOT's current practices, SDOT will target schools and historic districts that have identified deficits in bicycle parking for new bike parking	Bike Parking Guidelines will be publicly accessible online. PDD will partner with Bike Share program to install 1500 bike parking spaces during the one year bike share permit cycle.
5.3 Develop a process for abandoned bicycle removal with repurposing options	Abandoned bicycles that are tagged and removed by SDOT personnel are donated to BikeWorks.	SDOT will continue to donate abandoned bicycles to BikeWorks. No timeline exists for a partnership with SPD to create a policy to donate abandoned bikes.	SDOT continues to remove abandoned bicycles from public bicycle racks after issuing a 72 hour notice.	SDOT will continue its current practices related to abandoned bicycles	SDOT will continue its current practices related to abandoned bicycles
5.5 Provide short-term and long-term secure bicycle parking at high-capacity transit stations, transit hubs, and heavily-used bus stops	SDOT will partner with other agencies to coordinate the development of long-term secure bicycle parking.	Secured bicycle parking is incorporated in the Northgate and Judkins Park station designs. SDOT will continue to monitor needs at existing stations, future stations in ST3, and the Seattle RapidRide expansion program.	SDOT continues to monitor bicycle parking needs at existing and future stations, including those in ST3, Seattle's RapidRide expansion program, and other high capacity transit locations.	SDOT continues to monitor bicycle parking needs at existing and future stations, including those in ST3, Seattle's RapidRide expansion program, and other high capacity transit locations.	SDOT continues to monitor bicycle parking needs at existing and future stations, including those in ST3, Seattle's RapidRide expansion program, and other high capacity transit locations.

BMP Strategy	Activity	2016 Status	2017 Status	2018 Status	2019 Status
PROGRAMS					
6.1 Develop a bicycle safety program	<p>SDOT will continue to build upon existing safety educational and encouragement programs, and create new programs. Towards this effort SDOT will:</p> <p>1. Provide bicycle education for primary school children</p> <p>2. Assess feasibility and cost of including middle school and high school roadway safety education (as part of the School Road Safety plan).</p> <p>3. Collaborate with partners to develop, strengthen, and distribute existing "Bike 101" materials to assist a wide range of current and new riders</p> <p>4. Engage with Seattle Public Schools to continue Safe Routes to School partnerships for traffic safety education and encouragement of walking and biking to school</p>	<p>1. SDOT is collaborating with Seattle Public Schools and Cascade Bicycle Club to develop a new pedestrian and bicycle safety curriculum that will be implemented in all public elementary schools. The curriculum program will be implemented in all 72 public K-5 and K-8 schools in September 2016.</p> <p>2. Pending the success of the elementary school program and funding availability, SDOT will expand the education program to middle and high school students in 2019.</p> <p>3. In 2016, SDOT will continue to publish an updated bike map; a magazine similar to the 2015 pilot BikeLife; and education and encouragement materials when projects such as the Eastlake and Roosevelt Protected Bicycle Lanes are complete.</p> <p>4. SDOT will continue to participate in the School Traffic Safety Committee, engage with advocacy groups and the Seattle Public Schools to promote walking and biking to school.</p>	<p>1. SDOT reached every 3rd, 4th, and 5th grade physical education class at Seattle Public Schools in partnership with Cascade Bicycle Club, and plans to continue to do so for the next seven years.</p> <p>2. SDOT will assess program expansion to middle school and high school classes.</p> <p>3. SDOT will continue to publish an annual printed bike map and distribute education and encouragement materials when projects such as the Westlake and Roosevelt Protected Bicycle Lanes are complete.</p> <p>4. SDOT will continue to participate in the School Traffic Safety Committee, engage with advocacy groups and the Seattle Public Schools to encourage walking and biking to school.</p>	<p>1. SDOT continues supporting the in-class room education at all Seattle Public Schools.</p> <p>2. SDOT piloted in-classroom education in Seattle Middle Schools in fall 2018.</p> <p>3. SDOT continues to distribute education materials when new bicycle facilities are complete.</p> <p>4. SDOT will continue to participate in the School Traffic Safety Committee, engage with advocacy groups and the Seattle Public Schools to encourage walking and biking to school</p>	

BMP Strategy	Activity	2016 Status	2017 Status	2018 Status	2019 Status
PROGRAMS					
6.2 Improve wayfinding and trip-planning opportunities for people on bicycles	SDOT will update the printed bicycle map annually.	On track.	SDOT continues to annually release a printed bicycle map. SDOT also released bicycle-related data to the public via data. seattle. gov, and is exploring more options to enhance public data availability.	SDOT continues to annually release a printed bicycle map. SDOT will utilize an updated bicycle wayfinding in delivery of new projects	SDOT continues its current practices
6.4 Support economic and community development through bicycle related activities	SDOT will attend and support events with similar mission and focus that encourage neighborhood-level active transportation.	SDOT will continue to attend and support events such as Summer Parkways, Bicycle Sundays, Kidical Mass, and the SR-520 bicycle ride.	SDOT will continue to attend and support events such as Summer Parkways, Bicycle Sundays, Kidical Mass, and other bicycle related activities.	SDOT will continue to attend and support events such as Bicycle Sundays, Kidical Mass, and other bicycle related activities.	SDOT will continue to attend and support events such as Bicycle Sundays, Kidical Mass, and other bicycle related activities
	SDOT will continue to work with CTR employers and TMP plans to provide bicycle workshops, co-sponsor the second Annual Employer Bike Summit, and promote the 2016 Bike Commute Challenge.	In 2016 and 2017, 97 bike racks will be installed at locations outside Center City adjacent to CTR employer locations or buildings with Transportation Management Program requirements. This will program will result in public bike racks outside all CTR and TMP locations. Ten more bicycle commuter workshops will be conducted in 2016 and then again in 2017 (by Commute Seattle).	SDOT has installed public bike racks at all feasible CTR and TMP locations, and will continue to conduct bicycle commuter workshops and other programs.	SDOT continued to offer various bike events and programming for Seattle employers, which are often open to the public. 2018 programming will include May Bike to Work Day (Bike Month Celebration) and Bike 101 for employers.	SDOT continues to offer various bike events and programming for Seattle employers, which are often open to the public. 2019 programming will include May Bike to Work Day and October Light Up Your Commute.

BMP Strategy	Activity	2016 Status	2017 Status	2018 Status	2019 Status
IMPLEMENTATION APPROACH					
7.1 and 7.2 Develop and strengthen procedures and processes for bicycle project delivery	<p>SDOT has a well-developed evaluation, design and public engagement process for neighborhood greenways. In 2016, SDOT will continue to use and refine this process, and will adapt it for other projects types such as protected bicycle lanes. In addition, SDOT will:</p> <ul style="list-style-type: none"> Allow temporary implementation of bicycle facilities 	SDOT will continue to conduct data driven planning processes, collecting quantitative “before” data and administering perception surveys as funding allows. SDOT will continue to support PARKing day type of temporary installation of bicycle facilities.	SDOT continues to make data-driven decisions. We are improving our Program & Project Management processes, which includes improved cost estimating tools, and streamlining our delivery and contracting methods. These improvements are expected to result in quicker implementation of bicycle projects and reduced costs.	SDOT continues to refine our project delivery processes with a focus on internal collaboration. In 2018, we are conducting initial feasibility studies of bike projects that occur in corridors with high demand from other modes. This information will allow for more strategic investments.	SDOT continues to look at processes to assist in delivering projects on time and within budget.
7.3 and 7.13 Review bicycle-related collisions, collision rates and frequencies over time and identify and implement safety strategies. Improve bicycle facilities as needed, based on performance criteria.	<p>SDOT will build on the existing collision review program and will:</p> <ul style="list-style-type: none"> Analyze bicycle-involved collisions per facility type to identify trends, behaviors, and engineering solutions Create a data-driven process to identify spot and/or corridor improvement projects <p>Develop a prioritized list of spot improvement projects</p>	SDOT is developing a Bicycle and Pedestrian Safety Analysis (BPSA) to address these concerns. The draft report is expected by the end of April and will help prioritize spot improvements for 2016 work program and beyond.	SDOT has completed development of the BPSA and will use this report to work towards proactively making Seattle's streets even safer. SDOT will continue to collaborate with SPD on increasing data sharing and data collection between the two departments.	SDOT launched Phase II of the BPSA in 2018. The results of the work will further allow SDOT to be proactive in making our streets safer.	SDOT expects to complete Phase II of the BPSA in 2019.
7.5 and 7.14 Create a multiuse trails upgrade and maintenance plan. Negotiate maintenance agreements with partners.	SDOT will develop a trails upgrade plan in 2015, which will guide future upgrades to the multi-use trails.	SDOT is developing a Trails Upgrade Plan to guide future investments. The draft report is expected by the end of April. Updated maintenance agreements with partners will be worked on following the Trails Upgrade Plan efforts (timeline unknown).	SDOT has completed the Trails Upgrade Plan	SDOT uses the Trails Upgrade Plan to guide maintenance and spot improvements throughout our Trail network	SDOT continues to use the Trails Upgrade Plan to guide maintenance and spot improvements

BMP Strategy	Activity	2016 Status	2017 Status	2018 Status	2019 Status
IMPLEMENTATION APPROACH					
7.6 Update the Bicycle Master Plan	SDOT will update the Bicycle Master Plan every 5-7 years		SDOT is required by Council Resolution to update the BMP and will begin work to update in 2018, aiming for a completed update in 2021, incorporating HALA and other major city initiatives.		The BMP update will begin in 2019.
7.10 – 7.12 Maintain on-street and off-street bicycle facilities. Consider maintenance costs, procedures, and long-term funding mechanisms are a part of all new bicycle facility projects. Encourage people to report improvements requests to SDOT	To address maintenance, SDOT will:				
	Create life-cycle costs per bicycle facility to better understand and gauge current and future maintenance needs	As we continue to build protected bike lanes, tracking maintenance costs is important. SDOT is currently researching best practices from peer cities	SDOT continues to research best practices related to maintenance costs for our newest facility types.	SDOT continues to research best practices related to maintenance costs for our newest facility types.	SDOT has allocated additional funds to facilitate maintenance of some of our most used facilities.
	Coordinate projects with Street Maintenance Paving plan	As part of the 2016-2020 BMP IMP Plan, SDOT is coordinating upcoming paving projects and proposed bicycle facilities for better alignment.	As part of the 2017- 2021 Implementation Plan SDOT looked for opportunities to coordinate paving projects and proposed bicycle facilities.	As part of the 2018- 2022 Implementation Plan SDOT looked for opportunities to coordinate paving projects and proposed bicycle facilities.	As part of this 2019- 2024 Implementation Plan SDOT continues to look for opportunities to coordinate paving projects and proposed bicycle facilities, and will continue to do so in the future.
	Evaluate additional bike facility sweeping as part of the SPU/SDOT street sweeping program	As the city builds a critical mass of protected bike lanes, SDOT will identify the most cost effective way to sweep bicycle facilities.	SDOT continues to research cost-effective ways to sweep our protected bike lanes.	SDOT continued to research cost-effective ways to sweep our protected bike lanes	SDOT continues to research cost-effective ways to sweep our protected bike lanes
7.17 Establish a broad based funding approach	Continue to promote existing ways for people to report maintenance and improvements requests	SDOT and the Mayor's Office are continuing to promote the web based, Find It, Fix It, application to improve reporting of maintenance requests.	SDOT and the Mayor's Office participate in Find It, Fix It walks with community members that aim to promote use of the app while reporting maintenance needs.	SDOT continued to utilize the Find It, Fix It app as well as participate in the Find It, Fix walks with community members.	SDOT continues to utilize the Find It, Fix It app as well as participate in the Find It, Fix walks with community members.
	SDOT will continue to research and pursue grants, and other funding opportunities.	The Transportation Levy to Move Seattle was approved by voters in 2015. There is \$65M for bicycle improvements over the nine year levy timeframe.	SDOT continued to look for grant and partnership opportunities to deliver more and make the most out of our Move Seattle funding.	SDOT continued to look for grant and partnership opportunities. In 2018 SDOT received \$16 M from the Washington State Convention Center to build key elements for the Center City Bike Network.	SDOT continues to look for grant and partnership opportunities to deliver more and make the most out of our Move Seattle funding.

APPENDIX 3: PROJECT LISTS

PROJECTS FUNDED THROUGH CONSTRUCTION WITH LOW RISKS					
Project Number	Project Name	Type	Length (miles)	Target year	Risk
1	AAC - S Columbian Way/S Alaska St (2018 AAC Package)	PBL	1.11	2019	Low Risk
2	AAC - S Dearborn St	PBL	0.46	2019	Low Risk
3	AAC - Swift/Myrtle/Othello (2018 AAC Package)	PBL	1.75	2019	Low Risk
4	AAC - Wilson Ave S (2018 AAC Package)	PBL	0.81	2019	Low Risk
Spot	Aurora and 83rd signal (2019 AAC Package)	Other	0 (spot)	2019	Low Risk, requires WSDOT Coordination
5	MMC - Union PBL	PBL	0.67	2019	Low Risk
6 ¹	NE 70th St PBL	PBL	0.10	2019	Low Risk, requires WSDOT Coordination
6 ¹	NE 70th St Connection to PBL	NGW	0.17	2019	Low Risk, connects to WSDOT Coordinated PBL
7	North Seattle NGW	NGW	2.70	2019	Low Risk
8	SRTS (High Point Loop)	NGW	0.88	2019	Low Risk
9	VZ - NE 65th St Vision Zero Safety Corridor	PBL	0.74	2019	Low Risk
10	West Seattle Phase 1	NGW	2.21	2019	Low Risk
11	12th Ave S PBL- Golf Dr to S King St	PBL	0.25	2020	Low Risk, requires Load Zone & Transit Access Coordination
12	AAC - Green Lake Park Loop (2019 AAC Package)	PBL	2.55	2020	Low Risk, requires Right of Way acquisition, requires coordination with Parks.
13	AAC - N 50th St (2019 AAC Package)	BL	0.27	2020	Low Risk
Spot	AAC - N 80th St (2019 AAC Package)-Green Lake PBL	Other	0 (spot)	2020	Low Risk
14	AAC - SW Avalon Way and 35th Ave SW (2019 AAC Package)	PBL	0.90	2020	Low Risk, requires Load Zone & Transit Access Coordination
15	Center City - 9th Ave N	PBL	0.24	2020	Low Risk, requires Private Development Coordination
16	Green Lake to Interurban Connection	NGW	0.38	2020	Low Risk
17	Judkins Park Connection	NGW	0.26	2020	Low Risk
18 ¹	Melrose Promenade (NGW segment)	NGW	0.83	2020	Low Risk
18 ¹	Melrose Promenade (PBL segment)	PBL	0.10	2020	Low Risk, potential for minor parking and loading impacts
19	N 34th St Mobility Improvements	PBL	0.33	2020	Low Risk
20	NGW Connection to Missing Link 1	NGW	0.35	2020	Low Risk, Dependent upon Missing Link project
21	NGW Connection to Missing Link 2	NGW	0.05	2020	Low Risk, Dependent upon Missing Link project
22	S Lander Street Bridge	Trail	0.24	2020	Low Risk
23	SRTS (Highland Park Connection Ph 1)	NGW	1.45	2020	Low Risk

PROJECTS FUNDED THROUGH CONSTRUCTION WITH LOW RISKS					
Project Number	Project Name	Type	Length (miles)	Target year	Risk
24	SRTS (Lowell - Meany Connection)	NGW	0.79	2020	Low Risk
25	SRTS (Viewlands Connection)	NGW	1.09	2020	Low Risk
26	SRTS (Wing Luke Elementary Connection)	NGW	0.80	2020	Low Risk
27	West Seattle Phase 2a	NGW	0.17	2020	Low Risk
28	Northgate to Maple Leaf Light Rail Connection	NGW	1.13	2021	Low Risk
29	Northgate to Pinehurst Light Rail Connection	NGW	1.12	2021	Low Risk
30	SRTS (Ingraham HS Connection Ph 1)	NGW	1.25	2021	Low Risk
31	West Seattle - 35th Ave SW Alternative - Camp Long Connection	NGW	0.72	2021	Low Risk, Dependent upon VZ signal project
32	West Seattle Phase 2b	NGW	1.21	2020	Low Risk
33	SRTS (Hazel Wolf K-8) Pinehurst Connection	NGW	0.89	2022	Low Risk, Dependent upon SRTS/ PMP signal project
34 ²	Center City -4th Ave (segment 1 Pine to Spring)	PBL	0.36	2020	Low Risk, potential for parking and loading impacts
35	Central Ridge Phase 1	NGW	0.75	2020	Low Risk, Previous commitment
	7th Ave	PBL	0.20	2020	Low Risk, construction by Amazon
	Battery St	BL	0.20	2020	Low Risk, construction by WSDOT
	Grand Totals		30.49		

PROJECTS FUNDED THROUGH CONSTRUCTION WITH RISKS					
Project Number	Project Name	Type	Length (miles)	Target Year	Risk
34 ²	Center City - 4th Ave (segment 2 Vine to Pine)	PBL	0.61	2021	Funding and Depending on design, level of service impacts, paving impacts
34 ²	Center City - 4th Ave (segment 3 Spring to Main)	PBL	0.53	2021	Funding and Depending on design, level of service impacts, paving impacts
36 ³	Center City - 8th Ave -Interim	PBL	0.55	2019	Potential for parking and loading impacts
37 ³	Center City - Pike/Pine Interim	PBL	0.60	2019	Potential for parking and loading impacts
38	King Street - 2019/2020 Delivery	NGW	1.05	2019	Private development to construct part
39	Burke Gilman Trail - Missing Link	Trail	1.42	2020	Legal challenges
40	Key Arena - NODO - Queen Anne/1st	PBL	0.47	2020	Private Developer to design and construct
40	Key Arena - NODO - 1st/Broad st	PBL	0.25	2020	Partnership-dependent
Spot	King Street - 12th & King	NGW	0 (spot)	2020	Design to coordinate with adjacent projects
Spot	King Street - Under I-5	NGW	0 (spot)	2020	Funding risk
41	Rainier Valley N-S Phase 2	NGW	0.67	2020	Requires trail lease agreement WSDOT
42	SRTS (Lincoln HS Connection)	NGW	0.35	2020	Potential for parking and loading impacts
43	VZ -Wedgwood to Roosevelt Connection	NGW	1.39	2020	Coordinate with 15th AAC

PROJECTS FUNDED THROUGH CONSTRUCTION WITH RISKS					
Project Number	Project Name	Type	Length (miles)	Target Year	Risk
36 ³	Center City - 8th Ave	PBL	Mileage will match interim design	2021	SDOT contractually obligated by Washington state convention center on funding amounts
37 ³	Center City - Pike/Pine	PBL	Mileage will match interim design	2021	SDOT contractually obligated by Washington state convention center on funding amounts
44	Central Water Front (Alaskan Way Viaduct Replacement)	PBL	0.67	2021	Partnership-dependent
45 ⁴	Northgate Light Rail- 1st Ave NE PBL (formerly Northgate Light Rail Station Project (Seg 2)	PBL	0.13	2021	Sound Transit partnership
46	Northgate Light Rail - Northgate Pedestrian and Bicycle Bridge	Trail	0.27	2021	Sound Transit partnership
45 ⁴	Northgate Light Rail- 1st Ave NE Multi-Use Path (formerly Northgate Light Rail Station (Seg 3)	Trail	0.38	2021	Sound Transit partnership
45 ⁴	Northgate Light Rail- 1st Ave NE PBL (formerly Northgate Light Rail Station Project (Seg 1)	PBL	0.38	2021	Sound Transit partnership
47	SRTS (Washington MS Connection)	NGW	0.60	2021	Coordination with Metro
48	Key Arena - Thomas St (Seattle Center to Waterfront)	NGW	0.37	2022	Design limited by available budget
49	Key Arena-Thomas St (Seattle Center to Eastlake)	NGW	0.86	2022	Design limited by available budget
50	Lake City to Maple Leaf NGW CROSSING	NGW	0.34	2022	Coordinate with WSDOT Paving (Requires signal approval)
51	SRTS (Emerson ES Connection)	NGW	1.06	2022	Design Dependent on Rainier Phase 3
52	Center City - Bell St PBL	PBL	0.22	2019	Coordination with Metro and Private Development. Requires major signal work.
53 ⁵	AAC - 15th Ave NE (AAC Package)-North Segment	PBL	0.94	2020	Low Risk
53 ⁵	AAC - 15th Ave NE (AAC Package)-South Segment	BL	0.25	2020	Low Risk
54	Center City -South End Connection	PBL	0.27	2020	Metro and Sound Transit coordination
55	Multi Modal Corridor-Delridge RR	TBD	3.10	2021	Transit Plus Multi-modal Corridor dependent
35	Central Ridge Phase 2	NGW	1.41	2024	Dependent on Madison RapidRide construction
56	AMB: Mt Baker Bicycle Connection	TBD	TBD	2023	Preferred route impacts Transit and travel times
Grand Totals			19.12		

PROJECTS FUNDED THROUGH DESIGN WITH LOW RISKS					
Project Number	Project Name	Type	Length (miles)	Target Year	Risk
57	SRTS (Stevens ES Connection)	NGW	0.63	2020	Low Risk, Dependent on SRTS partnership
58	SRTS (Orca K-8 Connection)	NGW	1.27	2021	Low Risk
50 ⁵	Lake City/Maple Leaf NGW Connection to Wedgewood	NGW	1.05	2022	Low Risk
59	SRTS (Beacon Hill ES)	NGW	0.80	2022	Low Risk
60	E Marginal Way	PBL	1.30	2021	Low Risk, Multi-agency coordination and grant funding
61	Georgetown to South Park	PBL/ Trail	TBD	TBD	Low Risk, Funding and Depending on design, level of service impacts
Grand Totals			5.04		

PROJECTS FUNDED THROUGH DESIGN WITH KNOWN RISKS					
Project Number	Project Name	Type	Length (miles)	Target Year	Risk
62	VZ- Interurban to Greenwood Connection	NGW	0.25	2020	Partnership-dependent
63	Lake Washington Loop	NGW	2.31	2024	Construction coordination
64	Multi Modal Corridor-Roosevelt RR	PBL	3.39	2023	Fully funded through construction pending FTA funds
65	SRTS (Olympic Hills to Cedar Park)	NGW	1.12	2023	Design dependent on signal approval and funding
66	SODO Trail	Trail	0.42	TBD	Multi-agency agreements, funding includes construction costs
67	Eastlake (Fairview to Stewart)	PBL	0.80	TBD	Multi-agency partnering and funding
Grand Totals			8.29		

¹This project is broken into a greenway segment and a protected bike lane segment.

²This project is broken into segments with different phases.

³This project is broken into an interim and a permanent phase.

⁴Northgate project broken into 3 segments.

⁵Project broken into 2 segments.

PROJECTS REMOVED SINCE 2017 IMPLEMENTATION PLAN			
Project Name	Type	Length (miles)	Removal Reason
35th Ave N PBLs (Paving Project)	PBL	1.20	Removed due to parking and travel impacts
Ballard/Crown Hill to Greenwood	NGW	2.60	SBAB Removed - 2018 Imp Plan; confirmed not a priority project in 2019 Imp Plan
Beacon Hill to Mt Baker Phase 2	NGW	1.50	SBAB Removed - 2019 Imp Plan
Fauntleroy Way SW PBL	PBL	1.30	SBAB Removed - 2019 Imp Plan
Greenwood Ave N PBL	PBL	1.20	SBAB Removed - 2019 Imp Plan
Montlake Blvd NE PBL	PBL	0.60	SBAB Removed - 2019 Imp Plan
NE 100th St PBL	PBL	0.30	SBAB Removed - 2019 Imp Plan
Northgate Light Rail Station Corridor - Segment 4	PBL	0.50	SBAB Removed - 2019 Imp Plan
One Center City - Broad Street PBL	PBL	TBD	SBAB Removed - 2019 Imp Plan
One Center City - Yesler Way PBL	PBL	TBD	SBAB Removed - 2019 Imp Plan
Roosevelt PBL Extension	PBL	0.50	SBAB Removed - 2019 Imp Plan
S Henderson St/Seward Park Ave S	BL	0.70	SBAB Removed - 2019 Imp Plan
Valley Street PBL	PBL	0.30	SBAB Removed - 2019 Imp Plan
12th Ave NE PBL-NE 67th to NE 75th St	PBL	0.50	Partnership - AAC delayed to after the Levy
N 130th St 2021 Paving	PBL	1.60	Partnership - AAC delayed to after the Levy
SW Roxbury 2021 Paving	PBL	1.00	Partnership - AAC delayed to after the Levy
NW Market St 2020 Paving	BL	0.60	Partnership - AAC Extents changed
Market/45th Transit Improvement Area	TBD	0.50	Partnership - No longer funded as a multi-modal corridor
Rainier Ave S Paving/RR	PBL	0.90	To mitigate risk, project designed to match funding. Focus on spot transit improvements
First Hill Streetcar: Broadway Extension	PBL	0.60	Project remains in BMP. Partnership - Streetcar Project put on hold.
Chief Sealth Trail Connections	TRL	0.30	City Light Coordination
Fauntleroy Way SW Boulevard	PBL	0.30	Fauntleroy Blvd. project put on hold
Madison MMC Complementary: 9th/University/Union	NGW	0.50	Previously considered with Madison BRT complementary route.
Madison MMC Complementary: Arthur/27th	NGW	0.80	Previously considered with Madison BRT complementary route.
Madison MMC Complementary: Thomas/24th	NGW	0.80	Previously considered with Madison BRT complementary route.
N 40th St (2019 AAC package)	PBL	0.29	Removed due to design constraints & funding risk.
Madison MMC Complementary: Denny Way	NGW	0.76	Previously considered with Madison BRT complementary route.
West Seattle North Admiral Connection	NGW	1.94	Removed due to design constraints & funding risk.
15th Ave S AAC Coordination (16th Ave S NGW)	NGW	0.28	Bike Lanes in previous plan. Complete streets evaluation resulted in parallel greenway on 16th as recommended. However, NGW Connection dependent upon NSF project currently in design review.
S Alaska St Connection: Columbia City	NGW	0.42	Stakeholder investment in connection. Removed due to design constraints & funding risk.
S Alaska St PBL	PBL	0.29	Stakeholder investment in connection. Removed due to design constraints & funding risk.

PROJECTS REMOVED SINCE 2017 IMPLEMENTATION PLAN			
Project Name	Type	Length (miles)	Removal Reason
Beacon Ave S PBL Study Only	PBL	0.87	SBAB Removed - 2019 Imp Plan
Myers Way S	PBL	1.24	SBAB Recommended for 2019 plan. Removed due to design constraints & funding risk.
Center City: Alaskan (Virginia to Elliot Bay Trail)	TBD	0.38	Did not receive grant or private funding.
Grand Total		25.57	

DRAFT

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